CLAIMS

What is claimed is:

1. A programmable logic controller that is used for performing pulse waves outputting , comprising of:

a microprocessor, for executing a pulse wave output program and outputting a command data; and

a pulse-transmitting unit, which is connected to the microprocessor, receiving command data from the microprocessor thereby performing pulse waves outputting.

2. The programmable logic controller in claim 1, wherein the pulse- transmitting unit is connected to the microprocessor via two IO ports.

3. The programmable logic controller in claim 1, wherein the command data is transmitted to the pulse-transmitting unit using a serial transmission.

4. The programmable logic controller in claim 1, wherein the command data defines the pulse wave frequency and the number of pulse waves.

5. The programmable logic controller in claim 1, wherein the pulse-transmitting unit is a small microprocessor with eight-bits of memory.

6. A pulse waves outputting method for a programmable logic controller, comprising the steps of:

executing a pulse wave output program via a microprocessor, and defining the pulse wave frequency and the number of pulse waves;

setting the serial transmitting initialization value via the microprocessor for serial transmitting; and

transmitting the command data which defines the pulse wave frequency and the number of the waves to the pulse-transmitting unit via the microprocessor in serial transmission.

7. A pulse waves outputting method for a programmable logic controller, comprising the steps of:

seting the initialization value of the serial transmission via a pulse-transmitting unit for serial transmission;

verifying the completion of the received data via the pulse-transmitting unit , if the received command data is not complete, then re-verifying the completion of the received data;

executing pulses wave outputting via the pulse-transmitting unit according to the pulse wave frequency and the number of pulse waves defined by the command data; and

verifying finish of the execution of the pulses wave outputting via the pulse-transmitting unit, if the pulse wave transmission command has been completely executed, if not, re-executing the pulse wave transmission, if it is, then re-verifying the completion of the received data.